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ABSTRACT

This report describes a program of peer tutoring using specific learning and metacognitive strategies to increase reading comprehension . The targeted population consisted of first through fourth grade students in self-contained regular education classrooms located in two adjacent suburbs of a large metropolitan area. The problem of poor comprehension was documented through student interviews, Title I placement, and standardized tests that indicate student academic performance. Analysis of probable cause data revealed insufficient teaching strategies, lack of parental involvement in relation to reading literacy, and an increase in English as a second language population. In addition, data indicated non-English-speaking students lack the knowledge base to comprehend reading material. A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: incorporation of learning and metacognitive strategies in reading; implementation of monthly book logs; and peer tutoring techniques and activities. Post intervention data indicated an increase in students' reading comprehension, an improvement in the use of graphic organizers, and an increase in the understanding and use of peer tutoring. (Contains 26 references and 9 tables of data. Appendixes contain the student interview questions, the parent survey, a book log, and the student evaluation rubric.) (Author/RS)

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PEER ASSISTANCE IN READING STRATEGIES

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ABSTRACT

This report describes a program of peer tutoring using specific learning and metacognitive strategies in order to increase reading comprehension. The targeted population consisted of first through fourth grade students in self-contained regular education classrooms, located in two adjacent suburbs of a large metropolitan area. The problem of poor comprehension has been documented through student interviews, Title I placement, and standardized tests that indicate student academic performance.

Analysis of probable cause data revealed insufficient teaching strategies, lack of parental involvement in relation to reading literacy, and an increase in English as a Second Language (ESL) population. In addition, the data indicated non-English-speaking students lack the knowledge base to comprehend reading material.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: incorporation of learning and metacognitive strategies in reading, implementation of monthly book logs, and peer tutoring techniques and activities.

Post intervention data indicated an increase in student's reading comprehension, an improvement in the use of graphic organizers, and an increase in the understanding and use of peer tutoring.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted first through fourth grade classes exhibit difficulty in reading comprehension that interferes with academic growth. Evidence for the existence of the problem includes student interviews, Title I placement, and standardized tests that indicate student academic performance.

Immediate Problem Context

The immediate setting includes two elementary schools in two adjacent districts. Site A is part of a large sized district that is comprised of three kindergarten through sixth grade (K-6) buildings and one Junior High (7-8) building. Site A is a K-6 building. Site B is also part of a large sized district that encompasses 13 elementary schools. It is comprised of six kindergarten through eighth grade (K-8) buildings, three kindergarten through fourth grade (K-4) buildings, two kindergarten through sixth grade (K-6) buildings, one kindergarten through third grade (K-3) building, and one fourth through sixth grade (4-6) bilingual building. Site B is a K-4 building.

The school populations at the two sites are similar as far as enrollment and attendance, but they vary in respect to ethnic

background and student mobility. On September 29, 1995, Site A's enrollment of 442 students was made up of the following racial/ethnic background: 58.8% White, 1.6% black, 33.7% Hispanic, and 5.9% Asian/Pacific Islander. On that same date, Site B's enrollment of 401 students consisted of: 20.4% White, 0.2% Black, 77.3% Hispanic, and 2% Asian/Pacific Islander. At Site A, 59.7% of the student population was identified as low-income, and the percentage at Site B was 62.8%. The limited-English populations were 17.9% and 48.1% at Sites A and B respectively. During the 1995-96 school year, the attendance rates were at 95.4% (Site A) and 93% (Site B). Student mobility rates were 24.8% and 45.3% at Sites A and B respectively. The chronic truancy rates were low for both sites with Site A at 0.2% and Site B at 0.9%.

The characteristics of the teachers are included with the statistics of each district. At Site A, the classroom teachers are: 100% White, while at Site B, the percentages are: 86% White, 13.8% Hispanic, and 0.2% Asian/Pacific Islander. Male teachers comprised 12.3% of the population at Site A, while 87.7% were female. At Site B the breakdown was 13.7% male and 86.3% female. The average teaching experience was 13.3 years (Site A) and 11.4 years (Site B). Bachelor's Degrees were held by 67.1% of the teachers at Site A, while 32.9% were at the Master's Degree and above level. Site B's experience was at 71.5% and 28.5% respectively.

Site A was built in 1928, and an addition was constructed in

1955, which included four classrooms and a lunch room. In March, 1996, due to unhealthy conditions, the lunch room was closed, which forced the children to eat in the gym. This has impacted the scheduling of physical education classes. There are 12 regular education classrooms, 3 self-contained special education classes, an Art room, and a Music room. An English as a Second Language classroom is used as a pull out program. A speech teacher, a social worker, a Title I teacher, and a diagnostic resource consultant also service the children at this site. Due to the increased enrollment in Site A's district, busing has been implemented at the various schools over the last three years. In the 1997-1998 school year, students in kindergarten at Site A are being bused to another school in the district. At the first grade level, students are being bused from other schools to Site A.

Site B was built in 1910. In 1964, an addition was built which added a library and a gym. Currently, the school is composed of 14 classrooms with a student population at an all time high of 492. Due to overcrowded conditions in the building, the library has been converted into a classroom. Music, art, and Media are all taught in the homeroom class by the Special teachers. Like Site A, the gym transforms into a lunch room during school lunch hours. Presently, there are six bilingual classrooms at this site. A Title I teacher, a social worker, a speech teacher, and a diagnostic resource consultant also service the children at this site.

Busing is also a factor at Site B. The fourth grade

bilingual students are bused to a district area school which houses the fourth through sixth grade bilingual classrooms. Additionally, some regular division fourth grade students are also bused to a nearby school. The self-contained bilingual classrooms service nearly 33% of the bilingual students. Another 13% of these students receive ESL services.

The reading curriculums at both sites revolve around basal series. Site A uses the Silver Burdett and Ginn series, which is taught as whole group instruction. The reading series at Site B is Houghton Mifflin's Invitations to Literacy, which is also taught to the whole group. Included in this series is the Early Success Reading Program, which is an intervention program for low readers. This program is used for small group instruction for groups of children who need reinforcement or reteaching. The average instruction time is 375 minutes per week at both sites.

The Surrounding Community

The two districts differ in size and expenditures, but are similar in administrative structure. On September 29, 1995 the student enrollment was 1,942 at Site A's district; while it was 10,227 at the district of Site B. The operating expenditures per pupil date back to the 1994-1995 school year. At Site A it was $4,9[illegible]6; while at Site B it was $4,119. Total expenditures were $9,272,707 (Site A's district) and $41,371,242 (Site B's district). The pupil-administrator ratios were 328.3:1 and 329.9:1 at the districts of Sites A and B respectively.

Class sizes and parents/guardians contact with teachers are

also factors in the operations of the two schools. The average class size on the first school day in May, 1996 at Site A was 24.5 in Kindergarten, 23.3 in Grade 1, 26.5 in Grade 3, and 33.5 in Grade 6. At Site B the sizes were 25 in Kindergarten, 28.3 in Grade 1, and 29.3 in Grade 3. The parents/guardians of 99.6% of the students at Site A made at least one teacher contact during the 1995-1996 school year, while at Site B it was 100%.

Community support has had an effect on both sites. At Site A referendums have been placed on the ballot in order to help with overcrowding and finances. In April, 1995, two issues were placed before the voters: to build an addition onto the Junior High and to increase the educational fund. Both referendums failed. In November, 1995, the first referendum passed, while the second failed by less than 50 votes. In March, 1996, the educational fund referendum was defeated again by a much larger margin. A local, angry taxpayers' group campaigned heavily against this referendum. At Site B, several referendums have also failed. Currently, local PTA groups at both sites have been lobbying for change in school funding.

Other pertinent information about Site A includes restructuring, busing, and strategic planning. Beginning with the 1997-1998 school year, Site A will change from three K-6 elementary schools and a 7-8 Junior High to three K-5 buildings and a 6-8 Middle School. At the present time, no inservicing has been done to make the transition smooth. There has also been busing at various grade levels to help alleviate overcrowding

since the 1995-1996 school year.

The Strategic Planning Committee has formed eight separate committees to foster and encourage research, develop goals three to five years in advance, and suggest specific strategies regarding goal attainment. These committees include K-5 curricula programs; 6-8 curricula programs; special services, programs and initiatives; financial planning and projections; enrollment projections/facility planning and support services; technology planning and initiatives; co-curricular and student activities; and community partnerships/participation/communications. These committees were scheduled to submit final reports on March 1, 1997.

Important issues in Site B include overcrowding and a change in administration. This site is faced with extremely overcrowded conditions. It is meant to house approximately 7,000 students, but it is closing in on the 11,000 mark. A referendum was on the ballot for the February 25, 1997 election. It was a $40 million bond issue that would allow the district to build two new schools to be ready in 1998 and another two schools in the year 2000 if needed. The referendum passed. The second concern is the change in the administration for the 1997-98 school year. Both issues will have an impact on the next school year.

National Context of the Problem

The problem of reading comprehension of students in general education classrooms has generated concern of educators at the national level. Teachers are faced with extreme pressure to raise

the reading scores of students. According to the National Commission on Excellence in Education, (as cited in Mathes, Fuchs, Fuchs, Henley, & Sanders, 1994), reading is necessary for economic survival, and it is estimated that one in three children have difficulty in reading.

"Poor readers have been shown to lack knowledge about the purpose of reading and to fail to spontaneously apply effective strategies to facilitate reading comprehension" (Kelly, Moore, & Tuck, 1994, p. 53). According to Marrow (1985), children who lack a concept of story structure, a general mental model of what stories are like and how they can be interpreted, often have comprehension problems.

Many educators believe that non-English-speaking students lack the knowledge base to comprehend reading material. They are taught to believe that the ability to decode words and to pronounce words correctly are mandatory for reading comprehension. Almost all non-native-born students do not pronounce English words correctly, therefore they have trouble decoding, and thus cannot comprehend the reading materials. "Our task as teachers is complicated by the cultural diversity of this nation. We need to become reasonably knowledgeable about our students' learning histories, and similarly cautious when making assumptions about their ability to comprehend content" (Steffensen,Juang-Den, & Anderson, 1979, p. 191).

Finally, family involvement contributes greatly to reading success. "Family literacy programs attempt to break the cycle of

underachievement by providing literacy experiences that benefit all members of the family, adults as well as children" (Handel, 1992, p. 116). "Those who read to others, are read to and questioned, hold conversations, and write notes at home gain an edge in language use" (Clark, 1982, p. 182).

In conclusion, there are many factors that contribute to the problem of poor reading comprehension of students in general education classrooms. These reasons include the students' lack of knowledge about the purpose of reading, the failure to utilize effective reading strategies, the cultural diversity of the students, and lack of family involvement. Educators, therefore, need to bridge these gaps in the students' experiences in order to solve the problem.

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

Three indicators were used to document the extent of poor reading comprehension: student interviews, Title I placement, and standardized tests. These indicators were conducted over a two week period of time in September of 1997.

The targeted population involved in the data collection consisted of 99 students. Of the 101 students, 24 attend first grade, 23 attend second grade, and 28 attend fourth grade at Site A. The remaining 26 students attend a second/third grade class at Site B.

Student Interviews

A student interview was developed by the researchers (Appendix A) to aid in the documentation of the problem. The interviews were conducted orally and tape recorded. A compilation of the results is presented in Tables 1, 2, 3, and in summary form where applicable.

Table 1

Do Pictures Help You Understand Stories?

Classroom	Yes	No/Sometimes
Site A, Grade 1	19	5
Site A, Grade 2	16	7
Site A, Grade 4	20	8
Site B, Grade 2/3	16	10

Of the 101 students interviewed in the targeted schools, when questioned if pictures help in understanding stories, 71% responded yes. When asked to explain their responses, many first and second grade students felt that pictures help them predict what is going to happen in a story. They also felt that pictures show what the characters are doing in a story which enables one to understand stories better. One child stated, "Pictures talk about the words that the author shows in the story." A fourth grader explained that pictures help because, "I understand what they're doing in the story instead of having to make a picture in my head. Then I'll understand it more." Of the students interviewed, 29% felt that at times pictures can help or that they do not help altogether.

One second grade child stated, "Sometimes I don't know the words, so I look at the pictures, and it helps me." Most fourth graders felt that pictures were unnecessary or did not exist in the books that they read.

The researchers believe that the results to this question are

appropriate at each grade level. Young children, as indicated in the first and second grade responses, are encouraged by instructors to use picture clues while reading. The use of pictures in primary text enable the child to refer to a drawing to get clues as to what the author is saying in the text. The words actually paint a picture and aid in comprehension of written material.

What do you do to become a good reader?

The researchers discovered varied responses for ways that one becomes a good reader. The following data is represented by site and grade level in narrative form.

Site A, Grade 1. When asked what does one do to become a good reader, the majority of children stated "to practice each day," "practice the word cards," and "try their best." Other responses included, "look at the letters," "sound it out," and "think in my head."

Site A, Grade 2. A majority of the second graders at Site A stated that they need to practice and read every day. Other responses included: "read a book again," and "figure out the words by myself or ask for help."

Site A, Grade 4. The vast majority of the students thought that you should read more and practice to become a good reader. Other responses included: "read different kinds of books instead of the same book over and over again," and "don't read too fast because you might mess up a lot."

Site B, Grade 2/3. When the children were asked to respond to what they do to become good readers, a majority of the students responded that they should practice reading every day. They also stated that they should start reading easy books and progress to harder, more challenging ones to show improvement.

The responses shown indicate that most students feel that in order to become a good reader, one should practice reading every day. Evidence shows that the targeted students do not practice reading every day. The students lack the reading strategies that enable one to be a good reader, therefore, they are poor readers. The researchers hope that through the interventions that the children will experience in class, the students will learn that becoming a good reader involves much more than simply reading every day.

What do you do to help you remember what you have read?

Regarding question three, of the 101 students interviewed, there seemed to be no consistent answers between different grade levels. The results that follow are represented by site and grade level in narrative form.

Site A, Grade 1. Results of question three indicated that 20% of the targeted first graders don't know what one does to help one remember what they've read. Remaining answers varied from "I just have to" to "read it three times or four" and "write it down."

Site A, Grade 2. Of the 23 targeted students interviewed, results show no consistent answers. Responses varied from "read

it again" to "my brain just remembers."

Site A, Grade 4. Most of the students of the targeted fourth grade class, 77%, responded that they should go back and read the text again. Other answers varied between "picture the pictures in my head" to "I put a bookmark by the page." Two of the students didn't know what to do.

Site B, Grade 2/3. Of the 26 students asked what they do to help them remember what they have read, 20% did not know. Of the remaining students, the majority stated they keep reading the material over and over again. A few students responded that they take notes, write it on a piece of paper, or they just memorize it.

A high percentage of students are not aware or have inaccurate thoughts about how one remembers text that they have read. Therefore, this data provides evidence of poor reading comprehension. Characteristics of effective readers utilize cognitive and metacognitive strategies before reading, during reading, and after reading to retain information. The researchers feel that the students are having difficulty with remembering and recalling facts from text because they lack the strategies that enable one to do so.

Regarding question four on the ability to tell the main idea of a story, of the 101 students interviewed, 41% stated that yes, they can tell the main idea. The researchers found this to be very interesting simply because when asked what the main idea of a story is, the students could not define it. The evidence shown in

Table 2 indicates that the students have difficulty identifying the main idea of a story, and the reader can not determine the author's viewpoint from story details. Therefore, this data provides evidence of poor reading comprehension.

Table 2

Can You Tell the Main Idea of a Story?

Classroom	Yes	No/Sometimes
Site A, Grade 1	Not Applicable	
Site A, Grade 2	19	4
Site A, Grade 4	16	12
Site B, Grade 2/3	7	15

Regarding question five, of the 101 students interviewed, 54% felt that retelling stories is difficult. When asked to explain their responses, many first graders stated they couldn't remember everything. A few added that they don't know how to read yet. One confident child exclaimed, "I never do!"

Of the second, third, and fourth graders interviewed, many felt that it was hard to remember everything that is read. They also felt if they couldn't read every word, that meant they couldn't retell a story. Of the students who felt confident, one second grader who stated sometimes said, "If the stories are easy, I can retell it." One fourth grader explained that, "Once you read it, you can understand it. If you read it really good, you can make pictures in your mind, and then you can tell it to somebody."

Table 3

Do You Have Difficulty Retelling Stories?

Classroom	Yes	No/Sometimes
Site A, Grade 1	11	13
Site A, Grade 2	14	9
Site A, Grade 4	15	13
Site B, Grade 2/3	14	12

The researchers found the data analysis for question five to be very interesting. More than half of the children stated that they do not have difficulty retelling a story. This number is found to be quiet high. Test scores show (see Table 4) that the targeted students experience extreme difficulty in comprehending reading material at their grade level. The researchers found it very hard to believe that the students felt at ease retelling a story, especially when most can not comprehend the written material.

How do you predict how a story will end?

The researchers found varied responses to how one predicts how a story will end. A summary of the responses is presented by each specific site and grade level.

Site A, Grade 1. Of the 24 students interviewed, a moderate 33% of the students stated that they didn't know how to predict. The remaining children had various responses: "turn the page and look," "read it before," "when it says happily ever after," and

"that's a hard one."

Site A, Grade 2. After a short explanation of what prediction was, approximately 35% of the 23 students interviewed were not sure how to predict how a story would end. The remaining 65% stated, "look at the pictures," "sometimes I just guess," and "I read a lot, so it's easy for me to predict."

Site A, Grade 4. Even though 15% of the 28 students interviewed stated that they didn't know how to predict, the responses showed that a further 35% also did not know how to use this strategy. Of these responses, some students stated that in order to predict how a story will end, "I read it to the end," or "It says the end." The remaining 50% felt confident in their abilities to predict. Some children stated, "Sometimes when I read the story, I know what is going to happen. Maybe I read a couple of sentences and then I think what is going to happen next."

Site B, Grade 2/3. After a brief explanation of what predicting was, 35% still felt they could not predict. Of the remaining 65%, they felt confident in this strategy because all you need to do is guess when predicting.

The researchers found the targeted students responses to question six, prediction, to be quite appropriate for their level of reading ability. The children have shown poor reading comprehension skills, lack of reading strategy application, and inaccurate knowledge of reading strategies. The responses show that the children do not have a strong knowledge base for making

predictions while reading. The researchers hope that the interventions the children will be exposed to in class will teach the children how to strategically use previously read text to make reasonable predications when reading text.

To document the extent of poor reading comprehension further, the researchers profiled each Title I Reading Program. Title I services are available at both sites.

Title I Placement

Placement in the Title I Reading Program also indicates that poor reading comprehension exists. At Site A, Grade 1, 20% of the class is currently enrolled in Title I. The second grade class at Site A has 26% of its students receiving these services. The Title I placement comprises 25% of the fourth grade class at Site A.

The students at Site B are of a unique classroom design. Of the nine students in third grade, eight have been identified as gifted. The remaining student has been tested and does qualify for Title I services. Of the 17 second graders, 2 students are eligible to receive Title I reading assistance. Due to increased enrollment, as of September, 1997, these three students have been placed on a list and will receive Title I services on a needs basis.

The children who receive Title I services are functioning at least one to two grade levels, sometimes three, below their classmates in reading ability and comprehension. This poses a problem within classrooms when direct reading instruction takes place in a

whole group setting. These students struggle, become frustrated, and often obtain a negative attitude toward reading.

Of the 101 targeted students in this study, 21% of them qualify to receive Title I Reading Assistance. These children encompass almost a quarter of each class, with the exception of the gifted class at Site B. This reinforces the belief that there is a need for concentration in reading instruction.

To further document the existence of poor reading comprehension, a standardized test was administered. This test was given during the first few weeks of the 1997-98 school year.

Standardized Tests

A third component for documentation was the Gates-MacGinitie Reading Tests. To measure the students' abilities to understand reading material, only the comprehension section of the test was administered. A summary of the results is presented in Table 4.

Table 4

Mean, Cut Score, Standard Deviation, and Percentage Below Average from Gates-MacGinitie Reading Test for all Targeted Classrooms

Classroom	Mean	Cut Score	SD	Below Average
Site A, Grade 1	6.04	7	3.9	64%
Site A, Grade 2	33.20	36	9.7	52%
Site A, Grade 4	30.15	34	9.6	59%
Site B, Grade 2	29.50	36	9.4	50%
Site B, Grade 3	38.38	38	8.2	38%

According to the Gates-MacGinitie Reading Tests, the stanine

of 5 is considered average. Out of the 25 first graders tested at Site A, 64% of the students scored below this stanine. Of the 23 second graders at Site A, 52% were also below the average. Finally, at Site A, of the 26 fourth graders tested, 59% ranked below the fifth stanine.

At Site B, of the 17 second graders who the test was administered to, 50% were below the average stanine. Even though eight out of the nine students in third grade at Site B have been identified as gifted, 38% fell below the fifth stanine.

Results of the Gates-MacGinitie Reading Test show that 56% of the regular division (not gifted) targeted students scored below average in reading comprehension. The researchers feel that the data analyzed in Table 4 is accurate since the students have not yet been exposed to the types of strategies that enable one to comprehend text. Of the remaining students, who have been identified as gifted students in their district, only 38% scored below average. Again, the researchers found this data to be precise because these students exhibit higher order thinking skills, exceptional reading ability, and advanced reading strategies as opposed to their peers.

The researchers have shown evidence to document the extent of poor reading comprehension. It has been shown that reading is a strategic process. In order to be a good reader, one must learn and utilize before, during, and after reading strategies effectively to understand text. Evidence shows that the targeted students are not aware of the effective tools that strategic

readers use to comprehend reading material. Therefore, the targeted students are experiencing difficulty in reading comprehension.

The researchers studied a number of causes to validate the evidence of poor reading comprehension at their respective sites. A survey was distributed to all of the parents of the targeted students as documentation of the probable causes.

Probable Causes

The dramatically changing population in targeted schools A and B show students exhibiting poor reading comprehension and the inability to use reading strategies. Possible factors include English as a Second Language, increasing class size, and the lack of parent involvement.

A parent survey (Appendix B) was designed by the researchers and distributed the second week of September, 1997. The survey was confidential, and the results indicate that the aforementioned factors are evident at both sites.

The following data is based on the distribution of 103 surveys which yielded a return rate of 94%. Of the surveys returned, 92% were from First Grade, 96% from Second Grade, 55% from Third Grade, and 100% from Fourth Grade.

When parents were asked the question if English was the primary language spoken at home, 30% responded no. Further questioning about whether another language was spoken in the home revealed that 55% of the population surveyed did so.

Parents were also asked how many students they thought should

be in a classroom. The gathered data indicated that 85% of the parents felt that class sizes should be at 25 or below. Currently, all four classrooms surpass this recommendation.

Parents were surveyed about if they read with their children. The results indicated 93% of the parents stated that they read with the children, whether it was on a daily, weekly, or other basis. However, the researchers note a discrepancy. When the children, in the student interviews, were asked if anyone read with them at home, 50% responded positively. These results indicate a significant discrepancy between the parents and children.

The results of the survey indicate that at Site B many of the parents speak little or no English. This problem is also on the rise at Site A.

According to the Cicero Chamber of Commerce Census (1991), 60% of the families are of Hispanic origin. Of the 60% of Hispanic families, approximately 30% are non-English proficient. This causes a major problem when it comes to involving parents in the education of their children. Parents must be able to read to and with their children at home. When parents are non-English speaking, students have no support at home and no reinforcement when reading.

Another major reason that children do poorly in reading and reading comprehension is because class sizes at both sites are steadily increasing. When the number of students per teacher ratio is 26 to 1, or in some cases 35 to 1, this makes an

educator's job more difficult. There is such diversity between the students that teaching reading becomes very individualized and time constraints do not allow teachers to prepare students in this manner. Due to the overcrowded conditions, a majority of instructional time is spent in teaching reading skills, as opposed to actual reading of text.

According to the Cicero Chamber of Commerce Census (1991), 6 1/2% of adults over 25 have completed 16 or more years of school. Fifty percent of those adults completed only zero to 11 years of school. Many parents at the targeted schools are unable to assist their child in reading due to their lack of education. Many of the parents can not read themselves. This results in the parents often neglecting to help their child in reading, and obtaining a negative attitude toward school and reading in general.

The literature suggests several underlying causes for poor reading comprehension in today's classrooms. Educators are confronted with extreme pressure to attain higher outcomes for all children. "Such expectations come at a time when the academic, social, and cultural constitution of classrooms has never been more complex or diverse"(Simmons et al., 1995, p. 387-388). Moreover, "the failure to teach many children to read is attributable in part to our schools' incapacity to deal with the ever increasing diversity of the school-age population"(Mathes et al., 1994, p. 44).

Research has shown that students lack the necessary skills to comprehend reading material. According Klingner and Vaughn

(1996), students who are not aware of their thinking processes lack the ability to apply the know-how to given tasks. "Many studies have found that young readers and poor readers do not use effective strategies for monitoring and constructing from text"(Kelly et al., 1994, p. 53).

In the literature reviewed, it was found that reading to children early in life gives them an upper-hand in school success because they have been acquainted with the language experience. When children read more, they naturally become better readers. According to Wilson (1986), their research indicates the following:

> In particular, our analyses suggest that for the child who is not reading at all, an average of as little as 10 minutes per day reading books could lead to a gain in the range of 15 percentile rankings on a standardized test of reading achievement.(p. 17)

In summary, many students are exhibiting poor reading comprehension because they lack specific strategies that enable one to become a good reader. Reading comprehension is a process that helps one make sense of text. It is a process that encompasses many before, during, and after reading strategies. Students who are exposed to specific reading strategies are provided with the opportunity to develop and build on their ability to make meaning out of text. This process begins in the classroom with direct instruction in reading strategies and, in order to be meaningful learning, the strategies need to be

reinforced at home. Fortunately, there are solutions that can be implemented into one's classroom to assist in teaching for understanding.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

A review of current literature indicates that teachers can improve student reading comprehension through the method of peer tutoring/reciprocal teaching. The development of metacognitive skills, the use of a variety of graphic organizers, and the establishment of a home and school connection can also aid students. Research has shown that peer tutoring is an effective teaching method and is relatively inexpensive to implement into the classroom.

Peer Tutoring

Johnson (1987), states that many students may learn better from their peers than from adults, and that many students benefit greatly from teaching other students. According to Fogarty and Bellanca (1992), Peer Tutoring incorporates:

> helping students learn from each other, both formally and informally, in their own age groups and cultures. Not only will tutoring provide a practical tool for classroom teachers to help at-risk and slower-learning students, it will provide a rich opportunity for students to develop bonds with their peers. (p. 15)

Lysynchuk, Pressley, and Vye (1990), describe peer tutoring or reciprocal teaching, as a method of reading instruction which improves comprehension in students who decode but have difficulty interpreting text. In addition, Palinscar and Brown (1984), stated that low achieving students benefit from this method when accompanied with comprehension-monitoring strategies.

Moreover, literature advocates several techniques that teachers can implement during instruction to help students improve reading comprehension. According to Palinscar and Brown (1988),

> Reading comprehension is conceptualized as a problem-solving activity in which the reader constructs meaning for the text while simultaneously reconstructing prior conceptions. Comprehension instruction is conceptualized as teaching students the thinking skills that foster interactions with the text. A specific instructional technique, reciprocal teaching, is conducted as a group problem-solving activity in which the students practice the use of four strategies to promote thinking while reading. (p. 53)

In the reciprocal teaching model, according to Klinger and Vaughn (1996), students are trained to use four strategies (prediction, clarification, question generation, and summarization), to increase reading comprehension. Lysynchuk et al. (1990), further stated that making predictions increases meaning and memorability. Clarification is a process which is used when there is a breakdown in understanding and steps are taken to restore meaning. Question generation focuses on

questions relating to important information in the text. Finally, Lysynchuk et al. (1990), define summarization as the ability to retell the most important ideas in one or two sentences.

The rationale for peer tutoring includes research that has shown it to be effective for all ability groups. "Mainstreamed learning disabled students, low-achieving nondisabled students, and average-achieving students all outperform their respective counterparts in non-Peabody classwide peer tutoring classes" (Mathes et al., 1994, p. 45).

According to Levin, Glass, and Meister, (1987), multiple studies have shown that peer tutoring has achieved substantial and positive results when it is compared to other methods. In this same study, Levin et al. also state, "It seems to provide the biggest bang for the bucks we have in education" (p. 66). Furthermore, Greenwood, Delquardi, and Hall, (1989), assert that peer tutoring makes more sense, has a greater effect on students performance, and is relatively inexpensive.

The number of children with limited English proficiency increased nationwide by 26% during the years 1980-1990. By 2020, the ratio of Hispanics is projected to increase from one in nine to one in four (Fuchs, 1996). In order to make classrooms more responsive to the diversity of its students, peer tutoring is effective. According to Azmitia (1988), this method can be extremely useful in classrooms wherein linguistic differences exist. The author also states that values of all ethnic backgrounds will be accepted because collaborative learning

provides an opportunity to bring all children from different backgrounds together.

Another effect of this method is positive self-esteem. Gallop (1988), states that one-to-one tutoring is an opportunity to increase students' self-esteem by fostering quality working relationships with their tutors.

The current research suggests that peer tutoring is effective for all ability groups and has substantial and positive results. The implementation of peer tutoring is cost effective and stimulates a positive atmosphere in the classroom. Peer tutoring can be most effective when used in conjunction with metacognitive skills.

Metacognitive Skills

The term metacognition refers to thinking about one's own thinking (Costa, 1985). When a good reader reads, he realizes that he didn't understand what he read. The reader will use the cognitive strategies of reread or recall for a better grasp of the material. However, when a poor reader reads, he doesn't know that he doesn't comprehend what he is reading. It is because he is unable to get meaning from the words (Bellanca & Fogarty, 1992).

The three components of metacognition are planning, monitoring, and evaluating. When metacognition takes place, a student is aware of his own thinking before, during, and after an activity (Bellanca & Fogarty, 1992).

Educators can help students develop metacognitive skills through the teaching of learning strategies. According to Paris,

Lipson, and Wixson (as cited in Winograde & Gaskins, 1992), "A learning strategy is any purposeful action that an individual takes in order to increase his/her successful completion of a task" (p. 229).

Some of the strategies include previewing the material, brainstorming, setting a purpose, tapping into prior knowledge, using visualization, paraphrasing, asking questions, rereading, taking notes about what has been read, writing stem statements, reflecting, keeping learning logs, and utilizing graphic organizers (Winograd & Gaskins, 1992). The purpose of these learning strategies is to give students a variety of specific techniques to aid in the comprehension of reading materials.

Graphic Organizers

Graphic organizers are visual tools that show facts and concepts and their relationships. According to Bellanca (1992),

> Primary teachers report using the organizers in cooperative lessons to help students organize thinking patterns. Middle grade teachers find the structures invaluable in bridging wide spreads of ability to comprehend textbook material: strong readers collaborate with weaker readers to understand key textual information. (p. v.)

Graphic organizers assist students in arranging their thoughts. The web is probably the most well-known cognitive organizer. Other designs include sequence frames, story maps, Venn diagrams, pie charts, ranking ladders, the target, the fishbone, the grid, prediction charts, the T-chart, and

information charts. New graphic organizers are continually being developed to meet not only the needs of students, but also that of society.

The prediction tree and the prediction chart have been found to be useful in foretelling a story. These organizers are visual ways to make predictions. Students are asked two questions: What will happen, and why do you think so? This technique can be implemented at the end of each page, chapter, or any other appropriate place. This strategy incorporates the planning and monitoring aspects of metacognition.

Graphic organizers can also be used to develop questioning techniques. The information chart teaches students to ask questions that gather information and to summarize that information (Bellanca, 1992). This strategy focuses on who did what to whom, when, where, and why? Fat and Skinny questions are intended to help students differentiate between questions that produce factual information and questions that promote higher level thinking (Bellanca, 1992). Fat questions elicit responses that are thought provoking. Skinny questions, on the other hand, only require a yes, no, or a one or two word answer. This technique is part of the evaluating process (Bellanca, 1992).

In order to facilitate clarification of concepts in text, the Venn diagram can be used to make thinking visual (Bellanca & Fogarty, 1991). This tool is used to compare and contrast information. The Venn diagram encompasses all three components of metacognition.

The sequence chart is a method students apply when summarizing a series of events from a story chronologically (Bellanca, 1990). Another approach used when summarizing text is story mapping. A story map is a way of telling the important events of a story from beginning to end. These organizers are used as tools to evaluate. In retrospect, these metacognitive skills can promote higher level thinking and increase student achievement.

Evidence has shown that children who engage in reading at home have a stronger language base than those children who do not have this opportunity. Therefore, a home-school connection plays an integral part in the success of a child's language development.

Home/School Connection

While the use of graphic organizers are beneficial in improving reading comprehension, a review of the literature regarding the issue of parental involvement gathered information that supported the importance of family support at home (Clark, 1982). As educators know, a child who is read to, who reads to others, who is questioned, and who engages in conversations at home, acquires an incredible advantage in the use of language over students who do not.

Studies have shown that many parents show concern and are willing to help their children, but they simply do not know exactly what to do when it comes to reinforcing academic skills (Clark, 1982). Many non-English-speaking care givers feel estranged from schools (Clark, 1982). Some parents purely do not

have the skills to aid in their child's educational potential. This leads teachers to believe that parents do not care, which is not the case.

Many parents are inclined to help in their child's education. Of studies researched, information shows that parents will almost always do whatever a teacher has instructed them to do (Clark, 1982). Where this becomes a problem is when the parents are intimidated and are afraid to ask how they can help their child at home. Research also has shown that low-achieving students are the children of academically challenged parents (Clark, 1982). Parents do have concerns and want to help, but yet they will not ask how they can assist because they are embarrassed. Most parents feel they lack the basic skills to challenge their child.

According to Clark, (1982), studies have shown that some of the following ideas can motivate parents without making them feel inferior:

1. Start by identifying low-achieving students. The children are usually the students who do not receive assistance.
2. Send home handwritten positive notes praising the child's progress.
3. Send home certain activities that parents can successfully complete with their child. One thing to remember is that the ease of the homework is not important, it's the communication going on between the parent and child. Rather than asking parents to read

with their child, encourage them to discuss the characters and events in the story. Parents need to feel that they are able to assist in their child's success.

4. Finally, keep tight parental contact. Parents need to know they're doing their part when aiding their children.

Parents are more apt to partake in their child's education if they believe that their assistance will help (Clark, 1982). In most cases, asking parents to reinforce a skill learned at school is threatening. Focusing on activities where parents feel comfortable, suggests that positive interaction will occur at home.

Literature has shown that parents can additionally assist in reading comprehension and higher order thinking skills (Clark, 1982). Teachers need to supply parents with questions to ask their child while reading. Sample questions might include: What happened in the beginning of this story? Middle? End? Who was the main character? Did this story teach anything? What happened first, second, next, and finally?

Some educators look at this as just one more thing for a teacher to do (Clark, 1982). Focusing on attention to parental-involvement will result in a positive, effective home-school relationship.

In conclusion, when developing a successful reading program, the literature suggests that implementing a wide variety of teaching strategies improves reading comprehension. Research has shown peer tutoring, the use of metacognitive strategies, graphic

organizers, and a consistent home-school connection are essential pieces of a complete puzzle. Each piece alone plays an important role, but until all the pieces come together, one is left with an incomplete picture.

Project Objectives and Processes

As a result of increased reading instructional strategies, during the period of September, 1997 to December, 1997, the targeted students from the two selected sites will increase reading comprehension during class activities through the use of graphic organizers, peer tutoring, and authentic assessment, as measured by portfolio assessment.

As a result of increased reading time, during the period of September, 1997 to December, 1997, the targeted students from the two selected sites will increase the level of engagement in reading at home, as measured by parental documentation.

As a result of implementing a peer tutoring program during the period of October, 1997 to December, 1997, the targeted students from the two selected sites will increase reading achievement, as measured by informal and standardized tests.

In order to accomplish the terminal objective, the following processes are necessary:

1. A survey will be created and administered to find out parental (home) information about the student's reading habits.
2. An interview will be constructed and orally administered to determine the student's view of personal reading habits

and strategies.

3. A series of learning strategies that address reading comprehension will be developed and implemented.

4. Within the lesson plans, time will be scheduled to implement classwide peer tutoring strategies.

5. Metacognitive activities will be developed and implemented during reading instruction.

6. Students will meet together on a variable schedule in order to complete peer tutoring assignments.

7. Informal and standardized tests will be administered as pre/post assessments.

8. Working portfolios will be required and used as a form of evaluation.

9. Rubric will be developed for students to evaluate their individual performances.

Project Action Plan

I. Parent and Student Information

A. Pre/Post Parent Survey (9-15-97, 1-6-98)

1. Primary Language

2. Reading Habits

a. time spent

b. library usage

3. Engagement in other mediums

4. Views of school's strategic plan

a. class size

b. instructional reading time

B. Pre/Post Student Interview (9-15-97, 1-6-98)

1. Reading Habits

a. independent

b. with others

2. Genre Interest

3. Perceptions of Reading Strategies

a. pictures

b. main ideas

c. prediction

d. summarizing

4. Personal Goals to Improve Reading Comprehension

II. Peer Tutoring Program (Sept. 1997 - Dec. 1997)

A. Selection of Tutors

B. Preparation of Tutors

1. Teach/Reinforce Social Skills

a. active listening

b. encouraging words

c. taking turns

d. six-inch voice

2. Model and Instruct Metacognitive Skills

3. Reinforcement of Metacognitive Skills

III. Metacognitive Skills (Sept.- Oct. 1997)

A. Predicting

1. prediction tree

2. prediction chart

B. Questioning Techniques

1. fat/skinny questions

2. the five w's

C. Clarifying

1. Venn diagram

D. Summarizing

1. story maps

2. the frame/sequencing

IV. The Home/School Connection

A. Reading Logs

B. Reading Homework

V. Assessment

A. Portfolios

B. Student evaluation rubrics

C. Journal stems

Methods of Assessment

In order to assess the effects of increased reading instructional strategies, portfolios will be kept throughout the intervention period. Student rubrics will be developed.

In order to assess the effects of increased reading time, reading logs will be kept throughout the intervention period at school charting home progress.

In order to assess the effects of the peer tutoring program, informal and standardized tests will be administered.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to increase reading comprehension in Grades 1 through 4 at Sites A and B. In order to achieve this goal, a peer tutoring program which incorporated social skills and metacognitive strategies was implemented.

A peer tutoring program was designed at each grade level in which students were taught four social skills: active listening, six-inch voices, encouraging words, and taking turns. Each social skill was taught and modeled separately in a whole group setting and reinforced throughout the program.

In addition to the teaching of specific social skills, prior to the actual implementation of the tutoring program, metacognitive strategies were introduced and modeled. Over a period of 10 weeks, the students worked with their peer tutors on four specific metacognitive strategies with the use of graphic organizers. The four were predicting, questioning, clarifying, and summarizing.

During the course of the intervention, each individual skill was addressed and practiced over several sessions during a two week period. The last two weeks of the program were devoted to

reviewing all four skills.

A second component of the program was the implementation of a Home/School Connection via book logs (Appendix C). At the beginning of each month, each child was given a book log which was to be completed at home. It was suggested that each child read every night with their parent(s). A monthly goal of 25 books/chapters was set for each student. Parents were required to date and initial each log on a daily basis.

As a method of assessment, portfolios and journal stems were used. Portfolios were utilized to gather a collection of artifacts which demonstrated the use of the metacognitive strategies. Journal stems allowed the students to reflect and transfer thoughts and ideas after each activity they engaged in. Upon completion of the program, each student was required to assess his/her performance using the student evaluation rubric (Appendix D).

Not all students completed the intervention. Due to student mobility, the number of students participating in the action research project changed from 24 to 22 students in the first grade, from 28 to 27 students in Grade 4 at Site A, 17 students to 15 in second grade at Site B, and from 9 students to 7 students in the third grade at Site B. The number of targeted students in second grade at Site A remained the same, at 23 students. Other changes from the original plan also occurred.

Deviations

During the course of action, the researchers noted four

deviations from the original plan. These deviations were in the areas of reading homework, length of time, silent-sustained reading (SSR), and inconsistent pairs.

In the original plan, the researchers' intent was to include reading homework as part of the Home/School Connection. During the course of action, the researchers decided not to include this component because the metacognitive assignments needed to be further developed in class before the students could complete them independently. Also, the researchers felt the book logs were sufficient documentation of the Home/School Connection.

At the onset of the peer tutoring program, the researchers had anticipated ending the program in December of 1997. However, the program was extended until January 26, 1998. This was done in order to further develop the mastery of peer tutoring and the use of the metacognitive strategies.

Another change from the original plan was that in Grades 2 through 4, a silent-sustained reading program was implemented. Each student was required to independently read for a minimum of 15 minutes each day. As previously stated, research has shown that as little as ten minutes of independent reading on a daily basis improves reading comprehension scores on standardized tests. The researchers felt that adding this component to the program would be beneficial. At the first grade level, the majority of the students were not independent readers at the time. Therefore, the teacher read orally to the students in place of silent-sustained reading.

A final deviation to the action plan was the inconsistency of the original pair partners. The researchers formulated specific pairs which were intended to be permanent throughout the course of action. However, due to pull-out programs, students absences, and transfers in and out of the sites, pairs had to be reformulated on a daily basis.

As a method of authentic evaluation, a standardized reading comprehension test was administered. For further documentation, student interviews were conducted, parent surveys were distributed, book logs were collected, and student portfolios were assessed by the students.

Presentation and Analysis of Results

A peer tutoring program and a variety of metacognitive strategies were implemented to encourage and strengthen reading comprehension in the classroom. At the termination of the program, the following evaluation tools were utilized to assess growth: student interviews (post), standardized tests (post), parent surveys (post), book logs, and portfolios.

Student Interviews

The students were given a post interview (Appendix A) to determine if specific reading techniques had been transferred into the students' repertoires of reading strategies. The results have been compiled and presented in Tables 5, 6, 7, and in summary form, where applicable.

Of the 94 students interviewed, when questioned if pictures help in understanding stories, 74% responded yes. Upon further

explanation, the majority of primary students stated that pictures help them. One child stated, "The pictures tell you what they're doing in the story." A third grader explained that pictures help because, "I take a picture walk and see what the story's going to be about." Finally, a second grade child stated,"Pictures give me ideas of what's happening in the story."

Table 5

Do Pictures Help You Understand Stories?

	Yes		No/Sometimes	
Classrooms	Pre	Post	Pre	Post
Site A, Grade 1	19	20	5	2
Site A, Grade 2	16	16	7	17
Site A, Grade 4	20	15	8	12
Site B, Grade 2/3	16	19	10	3

Of the students interviewed, 26% felt that, at times, pictures can help or that they are unnecessary. One fourth grade child said, "The pictures don't really tell what happened. They only tell a part of it." It was interesting to note that two first graders, who are competent readers, felt they didn't need pictures.

Prior to the intervention, the researchers found that the results to this question were appropriate at each grade level. At the end of the program, the researchers at Site A noted there was little change in the responses. At Site B, however, a dramatic change occurred. The researcher observed that the students were

applying the correct terminology presented throughout the program. Even though appropriate strategies were used by the students in using pictures as an aide to comprehension, the researchers noted a lack of transfer in the students' awareness of what they do to become good readers.

What do you do the become a good reader?

The researchers discovered that the targeted students felt that reading every day is the main component for becoming a better reader. In these responses, the researchers were disappointed because the interventions included pre-reading, during reading, and after reading strategies. The interviews demonstrated that the students are unaware of their thinking processes while reading, and therefore, were unable to verbalize that there had been transfer from the program. The students' inability to articulate what they do to become good readers was also evident when asked what they did to help them remember what they've read.

What do you do to help you remember what you have read?

Across the board, at Site A, the targeted students displayed no significant growth in the ability to verbalize the strategies they used to remember what they'd read. Following the intervention, the students still responded, "Write it down," "read it again," and "my brain just remembers." On the other hand, at Site B, there were a few noteworthy responses that indicated the students showed signs of transfer. A second grader stated, "Sometimes I try to use a story map or a picture frame." A third grader responded, "I make notes, reread, and use a story map."

"I'll take a picture walk and think about the words that I read," volunteered another third grader.

A high percentage of students are still not aware of the strategies they use to remember text they have read. During the intervention, metacognitive techniques were focused on to assist students in retaining information during reading. The researchers felt that the students are using the strategies to help them remember what they've read, but they are unable to articulate this in their daily language. This inability was also evident when asked if they were able to state the main idea of a story. The results of the students' responses are shown in Table 6.

Table 6

Can You Tell the Main Idea of a Story?

	Yes		No/Sometimes	
Classroom	Pre	Post	Pre	Post
Site A, Grade 1	Not Applicable			
Site A, Grade 2	19	16	4	7
Site A, Grade 4	16	12	12	15
Site B, Grade 2/3	7	16	15	6

The evidence indicates that at Site A, Grades 2 and 4, the number of students who felt they could tell the main idea of a story had slightly dropped. At Site B, Grade 2/3, the students were confident in their ability to state the main idea. The researchers again feel that the students are capable of identifying the main idea, as they've displayed the knowledge in

class. They are, however, still unfamiliar with the terminology.

While the researchers were able to ascertain that the students could identify main ideas of stories, the question about retelling stories netted different outcomes. Varied results were found in the students' knowledge of this skill.

The researchers found the data analysis to vary within each classroom. At Site A, Grade 1, the results are skewed because some of the children are still not familiar with the term retelling, and the children feel they have to repeat the story word for word. The fourth grade students at Site A who are still having difficulty, expressed that either the stories were too long, or they didn't understand the stories. Significant differences occurred in Grade 2 at both Sites A and B. At this grade level, the students felt more confident in their abilities to retell a story in their own words. The researchers feel that the implementation of the metacognitive strategies may have been instrumental in this positive change.

Table 7

Do You Have Difficulty Retelling Stories?

	Yes		No/Sometimes	
Classroom	Pre	Post	Pre	Post
Site A, Grade 1	11	12	13	10
Site A, Grade 2	14	6	9	16
Site A, Grade 4	15	15	13	12
Site B, Grade 2/3	14	0	12	22

While retelling a story was difficult for some students, prediction didn't pose a problem for most of the targeted students. Unlike summarizing, prediction allows for more than one correct answer.

How do you predict how a story will end?

Following the student interviews, the researchers concluded the vast majority of students can verbalize how they predict using the strategies that were taught during the intervention. Evidence of this is shown by the responses. A first grader stated he predicts,"by looking at the pictures and using clues on the page." Another child in the fourth grade commented, "I close the book and think what has happened so far, and then I predict what's going to happen." At Site B, a student shared, "I listen to the beginning and middle of the story to get an idea for the ending."

The researchers found the most dramatic change was in the ability to make predictions. It is felt that the intervention exposed the students to strategic techniques to achieve mastery in this skill.

To further document growth of reading comprehension, the researchers administered a standardized test. The test was given at the end of the intervention period.

Standardized Tests

Another component for documentation of growth was the Gates-MacGinitie Reading Tests. Only the comprehension section of the test was administered. The results are presented in Table 8.

Table 8

Mean, Cut Score, Standard Deviation, and Percentage Below Average from Gates-MacGinitie Reading Test for all Targeted Classrooms

Classroom	Mean		Cut Score		Standard Deviation		Below Average	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Site A, Grade 1	6.04	10.64	7	7	3.9	3.5	64%	32%
Site A, Grade 2	33.20	38.30	36	41	9.7	9.9	52%	35%
Site A, Grade 4	30.15	35.85	34	36	9.6	8.7	59%	44%
Site B, Grade 2	29.50	37.60	36	41	9.4	7.6	50%	40%
Site B, Grade 3	38.38	42.00	38	40	8.2	4.7	38%	14%

According to the Gates-MacGinitie Reading Tests, the stanine of 5 is considered average. Results revealed growth at all the targeted sites. Of the 22 first graders tested at Site A, only 32% of the students fell below a 5 stanine, as compared to 64% in the fall. This indicates a 50% growth rate in reading comprehension. Of the 23 second graders at Site A, 35% now scored below the average, while the figure was 52% in the fall. This represents a growth rate of 33%. Finally, at Site A, of the 27 fourth graders tested, 44% ranked below the fifth stanine, in contrast to 59% prior to the intervention. This denotes a 25% rate of growth. Of the 15 second graders tested at Site B, 40% of the students fell below the fifth stanine, as opposed to 50% in the fall. This shows a 20% growth rate in comprehending reading

material. At the third grade level, of the seven students tested, only 14% scored below the average, compared to 38% in the fall. This represents an increase of 63% in reading comprehension.

Prior to the interventions, 56% of the regular division (not gifted) targeted students scored below average in reading comprehension. Following the interventions, the students scores on the Gates-MacGinitie Reading Tests significantly improved. The post test showed only 38% of the students scored below average. this represents and improvement of 32%. Of the remaining seven students at Site B, Grade 3, six have been identified as gifted. It was at this site where the researchers noted the most significant increase in reading comprehension. The test results indicate a 63% growth rate. The researchers, therefore, conclude that peer coaching incorporated with the use of metacognitive strategies are very effective tools when teaching reading comprehension to gifted students, as well as regular division students.

Throughout the program, student portfolios were kept to monitor their progress. A rubric was designed by the researchers and given to the students to assess their performances shown throughout the portfolios.

Portfolios

The researchers utilized portfolios in the classroom to document students' development of the metacognitive strategies throughout the intervention. The portfolios were kept as meaningful collections of student work to show their efforts,

achievements, and progress in reading.

At the completion of the program, the researchers administered a rubric to each of the targeted students which allowed them to assess their own performance during the program. The students were asked to evaluate their work by using this rubric in the areas of: journals, partner work, effort, and book logs. In general, the researchers felt the students were accurate in their individual assessment. The responses were genuine in that the students were willing to admit if they did not put forth their best effort and had incomplete journals and book logs. On the other hand, students also gave themselves recognition where it was rightfully deserved.

In order to determine if parental involvement was a factor in increasing reading comprehension, students kept monthly book logs. At the end of the intervention, the researchers also readministered a parent survey.

Home/School Connection

The first component to document the Home/School Connection was a parent survey. At the end of the intervention, 94 post parent surveys were distributed. This number represents only the students who participated in every aspect of the program. The return rate of the surveys was: 86% from first grade, 97% from second grade, 86% from third grade, and 93% from fourth grade.

In order to document parental involvement in reading, parents were asked if they read with their children. The results indicated that 100% of the parents at Site A stated that they read

with their child, whether it was on a daily, weekly, or other basis. The targeted students were also asked the same question. The results concurred at the first grade level. However, the researchers noted a discrepancy at the other grade levels. In the remaining classrooms at Site A, less than 50% of the students responded positively to this question.

At Site B, the results indicated that 90% of the parents stated they read with their child, however, 82% of the children stated they read to a parent. Although there is a slight difference between responses, the researchers felt the figure was insignificant.

A second component to document the Home/School Connection was the implementation of monthly book logs. The goal was to read 25 books/chapters each month. The results are presented in Table 9.

Table 9

Book Log Return Rate

Classroom	October	November	December	January
Site A, Grade 1	73%	59%	50%	59%
Site A, Grade 2	100%	87%	83%	74%
Site A, Grade 4	74%	52%	41%	30%
Site B, Grade 2/3	100%	86%	55%	41%

A significant decrease occurred after the first month. There was a steady decline in the return rate overall, with the exception of grade one at Site A. In conclusion, the researchers noted the parental involvement decreased as the program progressed.

Even though the Home/School Connection did not meet the anticipated outcome, it is still considered a valuable component of this program. Generally speaking, the targeted students exhibited an increase in growth in reading comprehension as shown through standardized test scores and ongoing portfolio assessment. Documentation of student interviews also indicated that the students are beginning to utilize metacognition strategies in their reading.

Conclusions and Recommendations

The intervention had a positive influence on the targeted students' abilities and attitudes towards reading. The researchers found that teaching metacognitive strategies and the use of a peer tutoring program are key components in increasing reading comprehension. The researchers are confident that a continuation of this program would produce student proficiency and greater interest in reading. The researchers conclude that increased reading opportunities lead to increased reading abilities and confidence among the students.

The following recommendations are made in order to elicit a more effective outcome in future peer tutoring programs. Due to mobility and absenteeism, it is suggested that flexible groups opposed to permanent pairs be considered. Additionally, time constraints and periodic schedule changes throughout the intervention period did not allow for the students to fully appreciate the effectiveness of the program. By extending the program, additional opportunities would allow the further

development of the metacognitive strategies. It is also recommended that the Home/School Connection be restructured in order to maintain parental involvement throughout the year. Some suggestions are: weekly reading logs opposed to monthly logs, inviting parents into the classroom to read to the students, and/or implementing an incentive program.

The program had many strengths. It was adaptable, diversified, and practical. Peer tutoring can be implemented in any classroom. It encompasses positive results for ESL, Title I, slow learners, and gifted students. The strategies used throughout the intervention can be used in many curricular areas. For example, in social studies, students can be asked to summarize a chapter using mapping techniques. In science, a Venn diagram can be utilized by comparing and contrasting two objects. When conducting experiments, prediction skills are necessary.

Students took great pride in the relationships they developed and in their increased reading abilities. Researchers received positive responses from the students about the activities they were engaged in with their partners. The researchers found standardized test scores and authentic assessment to be excellent instruments to evaluate student performance. Other educators should be encouraged to incorporate metacognitive strategies and peer tutoring into their reading programs.

The next step in research would be to expose an experimental group to the peer tutoring program while maintaining a control group. This would determine if the interventions played a

significant role in the increase of reading comprehension, or if other factors, such as maturation, played a part.

Reading comprehension is a national problem. One measure of success in reading is through reading scores. Also, one of the main focuses in education is to raise these scores. This program clearly demonstrated improved test scores in reading comprehension. The strategies that were implemented throughout the intervention have been attributed to helping students comprehend reading material. Therefore, implementing a peer tutoring program is one way of alleviating the problem of poor reading comprehension in order to address national problem.

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APPENDIX A

STUDENT INTERVIEW

Student Interview Questions

1. Do you read at home? How often?

2. Does someone read to you or with you at home? Who?

3. What types of books do you like to read?

4. How do pictures help you to understand a story?

5. What do you do to become a good reader?

6. What do you do to help you remember what you have read?

7. Can you retell a story in your own words?

8. Do you have trouble retelling a story? Why or why not?

9. How do you predict how a story will end?

10. What goals can you set for yourself to become a better reader?

APPENDIX B

PARENT SURVEY

Parent Survey

Dear Parent/s,

I am working toward a Master's Degree at St. Xavier University. I am conducting a research project involving peer tutoring (student coaching) and its effect on reading comprehension. Please take a few moments to complete this survey and return it to me by 9/17/97. Thank you for taking the time to help me complete my research project.

Mrs. Krzyzaniak

Please circle the answers.

Is English the primary language spoken at home? **yes** **no**

Is another language spoken at home? **yes** **no**
If yes, what language? _____

How often do you read with your child/ren?
daily **weekly** **never** **other** _____

How much time does your child/ren devote to video games, TV, computer games, etc. on a DAILY basis?
less than 1 hour **1-2 hours** **2 or more hours**

How much time does your child/ren read by him/herself (including picture books) on a DAILY basis?
less than 15 minutes **15 - 30 minutes** **30 minutes or more**

Do you think that the school spends enough time teaching reading? **yes** **no**

How many students do you think should be in a classroom?
under 20 **20 - 25** **26 - 30** **other** _____

Does your child/ren have books to read at home? **yes** **no**

Does your child/ren have a library card? **yes** **no**

How often do you utilize the local library for reading material?
never **weekly** **monthly** **other** _____

How do you view your child/ren's reading ability?
low **average** **above average**

APPENDIX C

BOOK LOG

_____ is on a reading journey in _____!
Student's name Month

DATE	TITLE/AUTHOR OF BOOK	INITIALS
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		

Dear Parent/s,
This sheet is to record the number of books that you read to your child or that your child reads to you. Write the date, record the title/author of the book, and your initials. Your child can choose any book and can read a book more than once. Please make every effort to read with your child every night. Anyone can be a reader. Our goal is for each child to read 25 books a month. Happy Reading!!
***Chapter books - record chapters read each night**

APPENDIX D

STUDENT EVALUATION RUBRIC

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Criteria	In Progress	Meets Expectations	Exceeds Expectations
Journal	3 or more missing or incomplete journal activities	1 or 2 missing or incomplete journal activities	All journal activities completed
Partner Work	Partners did not work well together	Partners worked well most of the time	Partners worked well together all of the time
Effort	Wished I worked harder	Did an OK job	Worked My Hardest
Book Logs	completed 0, 1 or 2 Book Logs	completed 3 Book Logs	Completed more than 3 Book Logs

Name _____ Grade I give myself _____ Date _____